THE CLAIMS

1. A method of providing release of cholecystokinin in a subject, comprising administering to the subject an effective amount of a luminal cholecystokinin releasing factor polypeptide comprising

i) a lysine residue;

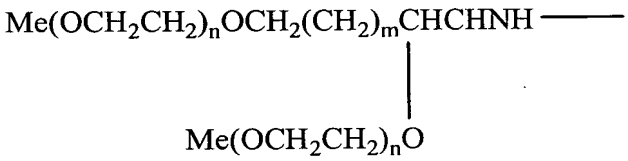
ii) an oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide; and

iii) an oligomeric moiety attached to the lysine residue,

whereby upon administration to the subject, said compound integrates into a cell membrane of the gut epithelium of the subject wherein the luminal cholecystokinin releasing factor polypeptide binds with a target receptor on the surface of an epithelial cell, thereby providing release of cholecystokinin.

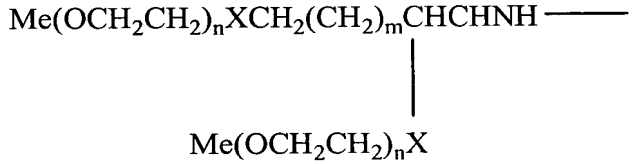
2. The method of claim 1, wherein the oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor peptide is a branched oligomeric moiety.

3. The method of claim 2, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20.

4. The method of claim 2, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S.

5. The method of claim 2, wherein the branched oligomeric moiety has a total average molecular weight of 4,000 to 10,000 Daltons.

6. The method of claim 1, wherein the oligomeric moiety is attached to the N-terminus using a hydrolyzable linker.

7. The method of claim 2, wherein the branched oligomeric moiety is attached to the N-terminus using a non-hydrolyzable linker.

8. The method of claim 1, wherein the oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide has a total average molecular weight of 4,000 to 10,000 Daltons.

9. The method of claim 1, wherein the oligomeric moiety is attached to the lysine residue using a hydrolyzable bond.

10. The method of claim 1, wherein the oligomeric moiety attached to the lysine residue is a linear oligomeric moiety.

11. The method of claim 10, wherein the linear oligomeric moiety is attached to the lysine residue using a hydrolyzable bond.

12. The method of claim 1, further comprising a lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

13. The method of claim 12, further comprising a linear oligomeric moiety attached to the lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

14. A method of treating obesity in a subject comprising administering to the subject an effective amount of a luminal cholecystokinin releasing factor polypeptide comprising

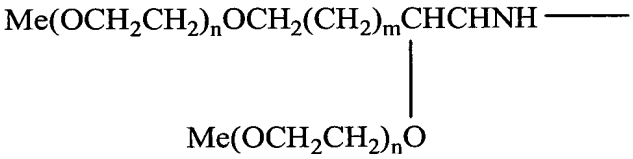
i) a lysine residue;

ii) an oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide; and

iii) an oligomeric moiety attached to the lysine residue.

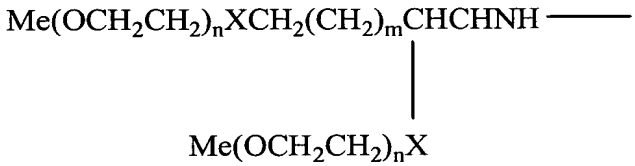
15. The method of claim 14, wherein the oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor peptide is a branched oligomeric moiety.

16. The method of claim 15, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20.

17. The method of claim 15, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S.

18. The method of claim 15, wherein the branched oligomeric moiety has a total average molecular weight of 4,000 to 10,000 Daltons.

19. The method of claim 14, wherein the oligomeric moiety is attached to the N-terminus using a hydrolyzable linker.

20. The method of claim 15, wherein the branched oligomeric moiety is attached to the N-terminus using a non-hydrolyzable linker.

21. The method of claim 14, wherein the oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide has a total average molecular weight of 4,000 to 10,000 Daltons.

22. The method of claim 14, wherein the oligomeric moiety is attached to the lysine residue using a hydrolyzable bond.

23. The method of claim 14, wherein the oligomeric moiety attached to the lysine residue is a linear oligomeric moiety.

24. The method of claim 23, wherein the linear oligomeric moiety is attached to the lysine residue using a hydrolyzable bond.

25. The method of claim 14, further comprising a lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

26. The method of claim 25, further comprising a linear oligomeric moiety attached to the lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

27. A method of providing release of cholecystokinin in a subject, comprising administering to the subject an effective amount of a luminal cholecystokinin releasing factor polypeptide comprising

i) a first lysine residue;

ii) a second lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide;

iii) a branched oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide using a non-hydrolyzable linker;

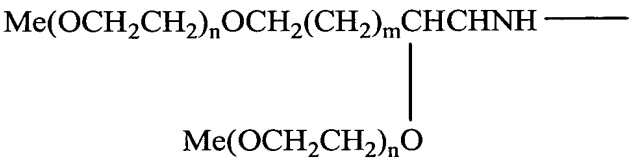
iv) a linear oligomeric moiety attached to the first lysine residue of the luminal cholecystokinin releasing factor polypeptide using a hydrolyzable bond; and

v) a linear oligomeric moiety attached to the second lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide,

whereby, upon administration to the subject, said compound integrates into a cell membrane of the gut epithelium of the subject wherein the luminal cholecystokinin releasing factor

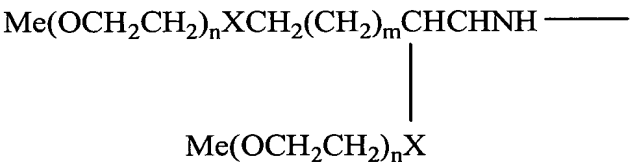
polypeptide binds with a target receptor on the epithelial cell surface, thereby providing release of cholecystokinin.

28. The method of claim 27, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20.

29. The method of claim 27, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S.

30. The method of claim 27, wherein the branched oligomeric moiety has a total average molecular weight of 4,000 to 10,000 Daltons.

31. A method of treating obesity in a subject, comprising administering to the subject an effective amount of a luminal cholecystokinin releasing factor polypeptide comprising

i) a first lysine residue;

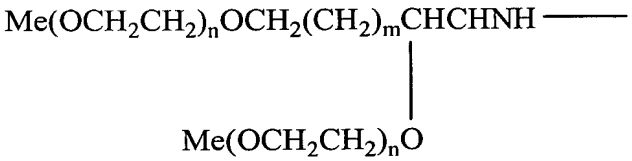
ii) a second lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide;

iii) a branched oligomeric moiety attached to the N-terminus of the luminal cholecystokinin releasing factor polypeptide using a non-hydrolyzable linker;

iv) a linear oligomeric moiety attached to the first lysine residue of the luminal cholecystokinin releasing factor polypeptide using a hydrolyzable bond; and

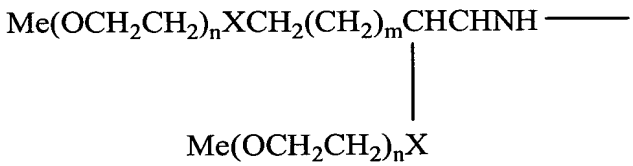
v) a linear oligomeric moiety attached to the second lysine residue at the C-terminus of the luminal cholecystokinin releasing factor polypeptide.

32. The method of claim 31, wherein the branched oligomeric moiety has the following formula:



where n is from 3 to 230 and m is from 0 to 20.

33. The method of claim 31, wherein the branched oligomeric moiety has the following formula:

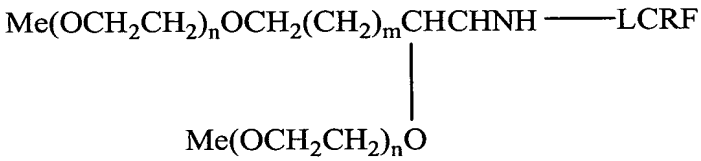


where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S.

34. The method of claim 31, wherein the branched oligomeric moiety has a total average molecular weight of 4,000 to 10,000 Daltons.

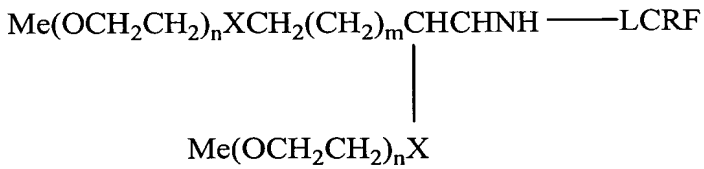
35. A method of treating obesity in a subject comprising administering to the subject an effective amount of a compound selected from the group consisting of:

a) A compound of the formula:



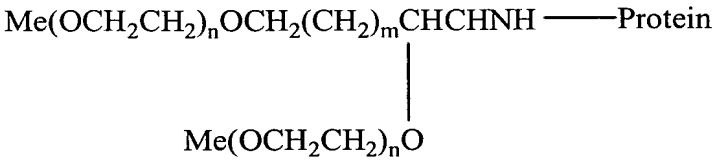
where n is from 3 to 230 and m is from 0 to 20;

b) A compound of the formula:



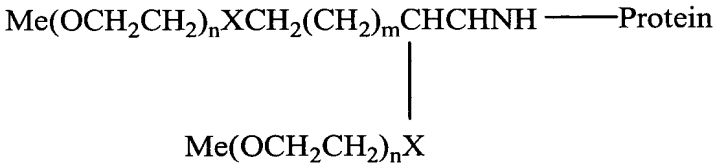
where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S;

c) A compound of the formula:



where n is from 3 to 230 and m is from 0 to 20; and

d) A compound of the formula:



where n is from 3 to 230 and m is from 0 to 20 and X is selected from the group consisting of N, O or S;

and any combination thereof.